

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
23 December 2004 (23.12.2004)

PCT

(10) International Publication Number
WO 2004/111013 A1

(51) International Patent Classification⁷: **C07D 239/10**

(21) International Application Number:
PCT/KR2004/001370

(22) International Filing Date: 9 June 2004 (09.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10-2003-0038246 13 June 2003 (13.06.2003) KR

Moongi-dong, Yuseong-gu, Daejeon 305-380 (KR). **KIM, Chang-Myung** [KR/KR]; R & D Park, LG Life Sciences Ltd., 104-1, Moongi-dong, Yuseong-gu, Daejeon 305-380 (KR). **KIM, Won-Sup** [KR/KR]; R & D Park, LG Life Sciences Ltd., 104-1, Moongi-dong, Yuseong-gu, Daejeon 305-380 (KR). **KANG, Seung-Wan** [KR/KR]; R & D Park, LG Life Sciences Ltd., 104-1, Moongi-dong, Yuseong-gu, Daejeon 305-380 (KR). **PARK, Ji-Hyun** [KR/KR]; R & D Park, LG Life Sciences Ltd., 104-1, Moongi-dong, Yuseong-gu, Daejeon 305-380 (KR).

(74) Agent: **CHOI, Kyu-Pal**; Halla Classic Building 4F., 824-11 Yeoksam-dong, Kangnam-gu, Seoul 135-080 (KR).

(71) Applicant (for all designated States except US): **LG LIFE SCIENCES LTD.** [KR/KR]; LG Twin Tower, East Tower, 20, Yoido-dong, Youngdungpo-ku, Seoul 150-010 (KR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **LIM, Jae-Hong** [KR/KR]; R & D Park, LG Life Sciences Ltd., 104-1, Moongi-dong, Yuseong-gu, Daejeon 305-380 (KR). **YOON, Joo-Yong** [KR/KR]; R & D Park, LG Life Sciences Ltd., 104-1, Moongi-dong, Yuseong-gu, Daejeon 305-380 (KR). **SONG, Jeong-Uk** [KR/KR]; R & D Park, LG Life Sciences Ltd., 104-1, Moongi-dong, Yuseong-gu, Daejeon 305-380 (KR). **SUNG, Lee-Taek** [KR/KR]; R & D Park, LG Life Sciences Ltd., 104-1, Moongi-dong, Yuseong-gu, Daejeon 305-380 (KR). **CHOI, Sung-Pil** [KR/KR]; R & D Park, LG Life Sciences Ltd., 104-1, Moongi-dong, Yuseong-gu, Daejeon 305-380 (KR). **SONG, Ho-Young** [KR/KR]; R & D Park, LG Life Sciences Ltd., 104-1, Moongi-dong, Yuseong-gu, Daejeon 305-380 (KR). **KIM, Jong-Yup** [KR/KR]; R & D Park, LG Life Sciences Ltd., 104-1, Moongi-dong, Yuseong-gu, Daejeon 305-380 (KR). **KIM, Yong-Zu** [KR/KR]; R & D Park, LG Life Sciences Ltd., 104-1, Moongi-dong, Yuseong-gu, Daejeon 305-380 (KR). **CHO, Young-Gyu** [KR/KR]; R & D Park, LG Life Sciences Ltd., 104-1,

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **HEPATITIS C VIRUS INHIBITORS**

(57) Abstract: The present invention relates to new compounds useful for the treatment or prevention of hepatitis C, process for preparing them, and a composition for the treatment or prevention of hepatitis C comprising the compounds as an active ingredient.



WO 2004/111013 A1